## 3.6.9 Energy Benchmarks for Newly Constructed Large Office Buildings, by Selected City and End-Use (thousand Btu per square foot)

|               | IECC Climate Zone | <u>Heating</u> | Cooling | Water Heating | Ventilation (1) |
|---------------|-------------------|----------------|---------|---------------|-----------------|
| Miami         | 1A                | 0.2            | 18.7    | 0.2           | 2.8             |
| Houston       | 2A                | 3.2            | 15.2    | 0.3           | 2.5             |
| Phoenix       | 2B                | 2.2            | 13.9    | 0.3           | 2.9             |
| Atlanta       | 3A                | 3.1            | 11.1    | 0.4           | 2.1             |
| Los Angeles   | 3B                | 0.5            | 8.6     | 0.4           | 1.9             |
| Las Vegas     | 3B                | 1.4            | 8.4     | 0.3           | 2.2             |
| San Francisco | 3C                | 4.2            | 5.0     | 0.4           | 1.7             |
| Baltimore     | 4A                | 6.2            | 9.8     | 0.4           | 2.1             |
| Albuquerque   | 4B                | 3.0            | 5.4     | 0.4           | 1.9             |
| Seattle       | 4C                | 5.7            | 3.8     | 0.4           | 1.5             |
| Chicago       | 5A                | 9.5            | 6.4     | 0.5           | 1.7             |
| Boulder       | 5B                | 5.4            | 4.1     | 0.5           | 1.7             |
| Minneapolis   | 6A                | 14.4           | 5.8     | 0.5           | 1.7             |
| Helena        | 6B                | 10.0           | 3.1     | 0.5           | 1.5             |
| Duluth        | 7                 | 17.6           | 3.3     | 0.6           | 1.6             |
| Fairbanks     | 8                 | 31.7           | 1.7     | 0.6           | 1.3             |

Note(s): Commercial building energy benchmarks are based off of the current stock of commercial buildings and are designed to provide a consistent baseline to compare building performance in energy-use simulations. The benchmark building had 498,588 square feet and 12 floors.

Benchmark interior lighting energy = 10.7 thousand Btu/SF. Interior equipment energy consumption = 15.94 thousand Btu/SF.

Source(s): DOE/EERE/BT, Commercial Building Benchmark Models, Version 1.3\_5.0, November 2010, accessed at <a href="http://www1.eere.energy.gov/buildings/commercial\_initiative/new\_construction.html">http://www1.eere.energy.gov/buildings/commercial\_initiative/new\_construction.html</a>.